



COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENVIRONMENTAL AFFAIRS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
WESTERN REGIONAL OFFICE

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Mr. Stanley W. Kulig, P.E., Director
Chicopee Department of Public Works
115 Baskin Drive
Chicopee, MA 01056

SEP 03 2004

Re: Chicopee - WWM
WPCF Bypass Disinfection
Project # 04-061-001

CWSRF-1787, Contract 002/04
BRP WP 68
Transmittal # W053516

Dear Mr. Kulig:

The Department of Environmental Protection - Western Regional Office has completed its review of the revised design plans and specifications for the projects referenced above, prepared on the City of Chicopee's behalf by Tighe and Bond, consisting of 47 sheets and titled:

WPCF Bypass Disinfection &
Paderewski Street Pump Station Modifications
Chicopee, Massachusetts
Contract 002/04 - CWSRF 1787
July 2004

The Department had, in its December 8, 2003 letter to Chicopee, previously approved the Paderewski Street Pump Station Modifications portion of the design plans, but required revision to the Water Pollution Control Facility (WPCF) Bypass Disinfection portion. This approval letter therefore addresses the remaining WPCF Bypass portion. The revised July 2004 design plans, referenced above, incorporate primary treatment of wet weather flow through the Chicopee WPCF, as required in the Department's December 8, 2003 letter.

The WPCF Bypass Disinfection Project was supported by the Department (DEP) as Phase 1 Combined Sewer Overflow (CSO) project as presented in the City's October 2002 Notice of Project Change to MEPA. The WPCF Bypass Disinfection project was projected to be capable of disinfecting approximately 43 million gallons per year of existing non-disinfected, screened, primary effluent discharged to the Connecticut River.



The revised July 2004 design plans for the proposed WPCF Bypass Disinfection project consists of construction of a new primary effluent pump station ("bypass pump station"), a new chlorine contact chamber (CCC), chlorination building addition, chemical storage and feed systems, bypass piping, CCC dewatering piping, and modifications to the existing dewatering pit. The proposed design will allow flow rates of up to 40 million gallons per day (MGD) entering the WPCF to receive preliminary and primary treatment, with 25 MGD continuing on to secondary treatment and disinfection, and 15 MGD being pumped by the new bypass pump station to the new CCC for disinfection and de-chlorination. The new CCC, chlorination, and de-chlorination system is intended to result in fecal coliform levels of less than 200 monthly average / 400 daily maximum, and total residual chlorine of less than 0.89 mg/l in the treated wet weather bypass flow.

The proposed bypass pumping station includes three 60 HP, 7.5 MGD submersible pumps, which will allow design flow of 15 MGD with two pumps in operation, with the third pump providing redundancy. The proposed bypass station will function in the event of a power outage as the existing WPCF emergency generator can handle this additional load. The new CCC is intended to be drained after most wet weather events, providing approximately 0.2 million gallons of effective wet weather storage per event. The contents of the CCC will drain to the existing dewatering pit, where it will in turn be pumped over an approximately 4 hour period, at a rate of approximately 600 to 800 gallons per minute, to the grit chamber effluent channel preceding the primary clarifiers.

In accordance with G.L. c.21 §§ 26-53 and 314 CMR 12.03(1), the Department hereby approves the submitted design plans and specifications for the WPCF Bypass Disinfection with the following conditions:

1. That the discrepancy in the size of the proposed CCC dewatering line as shown on Sheet C-1 ("12 inch diameter PVC") and Sheet M-2 ("8 inch diameter PVC") be resolved, and
2. That the 10 inch diameter line (Invert Out = 58.30) leaving the DMH just east of the existing Oxygen and Chlorination Building, noted "to be abandoned", is plugged to prevent an illicit connection from the dewatering pit to the yard storm drain system.

This approval is in addition to any approval to be issued by DEP Division of Municipal Assistance for CWSRF purposes.

If there are any questions regarding these projects, please contact the undersigned or Kurt Boisjolie at (413)-755-2284.

Sincerely, /s/

Mark A. Schlee-weis
Program Chief
Wastewater Management

cc: Tighe and Bond: Attn: Chris Bone, 53 Southamptton Road, Westfield MA 01085-5308
Don St.Marie: DEP-MS-Boston, 1 Winter Street, 5th Floor, Boston, MA 02108
Mark Casella: DEP-Boston, 1 Winter Street, 5th Floor, Boston, MA 02108
George Harding: USEPA Region 1, Congress Street, Boston, MA
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